Attorney Docket No.: Navy Case 84628

Applicant: Carl L. Sisemore Serial No.: 10/657,486

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## Amendments to the Claims:

The following listing of claims will replace all prior versions of claims in the application:

1. (Currently Amended) A method for structural modeling of a ship including equipment, hull, keel and integral structure, the method comprising:

constructing a thin shell hull model of the ship having cross-sections extending along a longitudinal centerline, the cross-sections defining wet and dry regions, the hull model having a plurality of hull nodes;

constructing a beam model of the ship within the dry region, the beam model having a principal beam that extends along the centerline, the beam model having a plurality of beam nodes;

connecting the principal beam to the hull model through a series substantially rigid rib connections from the beam nodes to corresponding members of the hull nodes;

adjusting the beam model to characterize inertial mass and stiffness of the ship; constructing a detailed model of a cross-section portion of the ship, the portion extending longitudinally along part of the beam and hull models, the detailed model including nodes that represent equipment, the hull model and the beam model; and

replacing the part of the beam model with the detailed model; and removing added lump masses along the beam at the detailed model.

2.	(Currently Amended) The method of claim 1 wherein adjusting the beam model further
comprises:	
	_adding lumped masses along the beam in approximate proportion to a mass distribution
of the ship, and;	
	varying cross-sectional and/or material properties of the model until ship and model
natura	I frequencies of the ship are in substantial agreement; and
	removing added lump masses along the beam at the detailed model.